

**OSHA REGULATORY UPDATE: ERGONOMICS,  
MANAGEMENT STANDARD, AND OTHER  
REGULATIONS --EFFECT ON COTTON  
GINNING**

**P.J. Wakelyn and P.K. Adair  
National Cotton Council  
Washington, DC**

**Abstract**

The Occupational Safety and Health Administration (OSHA) is the agency that has authority over all health and safety standards in the cotton gin workplace. OSHA has a very active regulatory agenda in 1997. This is discussed with special emphasis on ergonomics and occupational safety and health management systems.

**Introduction**

The U.S. Occupational Safety and Health Administration (OSHA), which is part of the Dept. of Labor, has authority over all standards affecting the workplace, including enforcement and promulgation of new standards. Twenty-three states are OSHA state plan states, which enforce OSHA standards in their states; federal OSHA enforces standards in other states. The Occupational Safety and Health Act, ("OSH Act"; P.L. 91-596, Dec. 29, 1970; effective April 28, 1971; amended by P.L. 101-552, Nov. 5, 1990; 29 U.S.C. 651 et seq.) states that each employer has a responsibility to comply with the standards promulgated under the Act. Cotton gins are considered as agricultural operations by OSHA, so the specific standards and regulations for cotton gins are found in 29 CFR 1928, Occupational Safety and Health Standards for Agriculture (Tables 1 & 2). The only general industry standards (29 CFR 1910) that apply specifically to gins are listed under 29 CFR 1928.21(a) (Table 2).

Standards for field sanitation (29 CFR 1928.110) and temporary labor camps (29 CFR 1910.142) are now enforced by the DOL, Employment Standards Administration (ESA) according to two orders by the Secretary of Labor (62 FR 111; Jan. 2, 1997). These orders (Order 5-96 and 6-96) delegate to ESA authority under the OSH Act to ensure that agriculture employers comply with these standards.

There are generic regulations/standards and comprehensive/substance-specific standards which may be applicable to your workplace. OSHA can cite a facility for failure to meet standards. The most recent citations for gins in states where federal OSHA enforces standards are given in Table 3. The OSH Act requires a safe and healthful workplace to be maintained:

"... to assure so far as possible every working man and woman in the nation safe and healthful working conditions..." [sec. (2)(b), OSH Act].

Also:

"Each employer -- (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees;..." [sec. 5(a)(1), OSH Act; "general duty clause"].

OSHA can cite for alleged violations under this so-called "general duty clause" if there is not a specific standard to cite. Recordkeeping, training, and the Hazard Communication Standard are usually the most cited standards.

In addition, OSHA can refer a case to the Department of Justice to bring criminal penalties against an employer. The OSH Act provides that any employer who willfully violates any OSHA requirement that causes death to any employee could be subject to criminal penalties including a fine (up to \$250,000 and \$500,000 for a corporation) or imprisonment (up to 1 year) or both.

Besides health and safety standards, the following are either required under the Act or give guidance regarding the Act:

- 29 CFR 1903 Inspections, citations, and proposed penalties
- 29 CFR 1904 Posting, recording and reporting requirements for occupational injuries and illnesses
- 29 CFR 1905 Rules of practice for variances, limitations, variations, tolerances, and exemptions under the Williams-Steiger Occupational Safety and Health Act of 1970
- 29 CFR 1908 Consultation agreements

You should know whether your state is a "state plan" state (i.e., administers its own OSHA program) or is under Federal OSHA, since state plan states can have different regulations than Federal OSHA -- state standards have to be "as effective as the Federal standards", but they can be more severe.

**OSHA in 1997**

In 1995 OSHA started its initiative to "reinvent" OSHA. OSHA has indicated that it is seeking to change administratively from an agency of "command and control" to one of partnership with employers toward a common goal

of safer workplaces. OSHA has announced several new programs and potential enforcement directives, including a system to evaluate safety and health programs, a revised penalty structure, and reduced penalties for immediate abatement. Employers who have safety and health management programs and are acting in good faith to protect workers will be treated differently from employers who lack such efforts, including fewer inspections and lower to no fines for violations. OSHA is working with stakeholders to develop new rules so that there will be more input, particularly from small business, prior to rules being proposed. This, in part, is caused by requirements of the Small Business Regulatory Enforcement Fairness Act (SBREFA). SBREFA among other things strengthens the Regulatory Flexibility Act of 1980. OSHA indicates they will focus on results, not red tape and will eliminate unnecessary regulations.

Alexis M. Herman has been nominated Secretary of Labor. She comes from the White House communications staff and she had the backing of organized labor. It is not known what her main interests and direction will be. Also, there will be a new Assistant Secretary of Labor for OSH, since Joe Dear has stepped down. The interim OSHA head is Greg Watchman, who was on the Senate Labor staff when the Democrats were in charge. If the first two years of the Clinton Administration are a guide it will be difficult to find a replacement for the OSHA head and rules and actions could be delayed.

### **OSHA Rulemaking**

#### **General**

For rulemaking OSHA has many requirements under the various laws that are necessary to be addressed. OSHA has to show that there is a significant risk of material health or safety hazard, that the standard will address the risk, and that the standard is cost effective and economically and technologically feasible.

A. Administrative Procedures Act requires an agency to go through notice and comment in promulgating a standard. Sometimes OSHA will use an advanced notice of proposed rulemaking (ANPR). But most often there is a proposal (notice of proposed rulemaking, NPR) with comment period and hearings followed by a final standard. OSHA does a regulatory impact analysis (RIA) to address economic impacts and benefits and a quantitative risk assessment to determine the risk of a substance or action.

B. Executive Order 12866 (58 FR 51735; Oct. 4, 1993) requires the agency to determine whether a regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and other requirements. The order defines "significant" regulatory action as one that is likely to lead to a rule that may: have an annual effect on the economy of \$100 million or more, or adversely and materially affect a sector of the economy,

productivity, competition, jobs, the environment, public health or safety, or state, local or tribal governments or communities. The RIA assesses the costs, economic impacts and benefits associated with a standard.

C. Regulatory Flexibility Analysis. The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq.), which was amended and strengthened by SBREFA, requires an agency to review rules to certify that they will not have "a significant economic impact on a substantial number of small entities".

D. Under The Paperwork Reduction Act of 1995 [44 U.S.C. 3506(c)(2)(A)] the agency is required to give the general public an opportunity to comment on proposed and/or continuing collection of information and to get a valid OMB control number for reporting requirements. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, and impact of collection requirements on respondents can be properly assessed.

E. Unfunded Mandates Reform Act (P.L. 104-4) establishes requirements for Federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector.

F. Environmental Justice. Executive Order 12848 requires that each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health effects of its programs, policies, and activities on minorities and low-income populations. These requirements are usually addressed in the RIA.

#### **Current Regulatory Activities**

OSHA publishes its regulatory agenda every six months in the Federal Register (the last one was Nov. 29, 1996). Part 1 of Table 4 contains the more important current activities. NCC participates in stakeholder meetings for the development of regulations, including ergonomics and safety and health management programs, to help OSHA better understand the concerns of our members. In addition, NCC files comments and testifies at hearings when appropriate to address industry specific concerns.

Ergonomics -- According to the Dept. of Labor, musculoskeletal disorders (MSDs) -- injuries of the back and upper extremities -- represent one in four lost workday incidents. In 1993, employers reported 615,000 such injuries. For example, ergonomic injuries could include a one time incident (e.g., back injury from lifting), cumulative/repetitive injuries, heat/cold stress, and vibration. It may be possible to get repetitive stress injuries of the wrist (carpal tunnel syndrome), back and other areas from working in several areas of cotton gins, if proper practices are not followed. There was an Advanced Notice of Proposed Rulemaking (ANPR) in 1992. Report language

in the 1996 budget appropriations barred OSHA from proposing an ergonomics rule. However, the 1997 appropriations did not contain this rider. Development of an ergonomics standard is a priority for OSHA. This was stated in Dec. 1996 after the election by the outgoing Sec. of Labor Robert Reich; it is the top regulatory issue for the AFL-CIO. OSHA is developing an "Action Plan" which will have a four-prong approach: education, research, enforcement and rulemaking. OSHA will solicit comments (through an ANPR) in early 1997 to help get additional information.

OSHA wants to shift the public debate from "do we have a problem?" to "yes, we do have a problem, now what do we do about it?". An ergonomics rule developed in health standards at OSHA will likely contain major risk factors, guidelines, and a non-voluntary enforcement component. The elements of an ergonomics standard will be:

- written program
- evaluation of jobs for "risk factors"
- elimination of "risk factors"
- employee training
- employee participation

A proposed rule is expected in 1998, but the agency must still decide the scope of the ergonomics rule before drafting regulatory text.

California adopted the first statewide ergonomics standard addressing repetitive motion injuries on November 14, 1996 which was expected to become effective in mid-January 1997. The California Office of Administrative Law (OAL) (similar to OMB) rejected the standard on January 2, 1997, because the rule fails to meet the clarity standard established by the California legislature. The CAL/OSHA standards board thinks they can correct the problem and will resubmit the rule with changes in April. The AFL-CIO does not think the standard is strong enough and that the board has taken the employers side of the issue. Industry does not think there is enough scientific information to set a standard. Both sides could challenge the standard in court if the OAL approves the submission. As currently written, the one and a half page long ergonomics regulation would affect all California businesses with 10 or more employees. It would be triggered when two workers performing identical tasks have been diagnosed with repetitive motion injuries within a 12-month period. Affected employers would be required to conduct work-site evaluations, engineer to control exposures to repetitive motion hazards, and provide employee training. Whether the standard can be revised by clarification or a new expanded rule is necessary is not known. However, this recognition of ergonomics problems can open the gates for court cases.

The American National Standards Institute (ANSI) Z-365 Committee has developed a draft standard covering cumulative trauma disorders of the upper extremities which

has not been released to the public. If this voluntary "national consensus standard" is approved by ANSI, OSHA could use it as a basis for citations for ergonomics under the general duty clause.

Finally, a safety and health management standard by OSHA and various state programs could be backdoor ways to enforce ergonomics rules.

Safety and Health Management Program Standard ("OSHMS") -- This regulation, to promote a safe and healthful workplace and identify and control/eliminate hazards in the workplace, could also include medical surveillance and monitoring requirements. It is a top priority at OSHA, and would be the centerpiece of OSHA programs. Companies with existing programs that meet OSHA's core elements may be grandfathered. A draft OSHA proposal was released in May 1996 and a proposal is expected by the end of 1997. The core elements of the program are:

- management leadership and employee participation
- hazard assessment
- hazard prevention and control
- training
- evaluation of program effectiveness

OSHA still has to clarify their positions on several issues which will effect small business. OSHA has to define the size of "small business" and what approach to take with small business (e.g., more compliance assistance and a more informal program).

At an international meeting of the International Organization for Standardization (ISO) it was decided in Sept. 1996 not to develop at this time international standards for occupational safety and health management similar to ISO standards for quality management (ISO 9000) and environmental management (ISO 14000).

California has had an OSHMS in place since 1989. The one page standards is performance oriented and California has a good consultation program, which helps businesses develop their plan and comply with the standard.

Other -- OSHA in February 1996 proposed revisions to the Occupational Injury and Illness Recording and Reporting Rules. Comments were submitted in May and a final standard is expected in early 1997. OSHA proposed a revised respiratory standard in 1994, which should be completed in the first half of 1997. A proposal on occupational exposure to tuberculosis is expected by March 1997. This should be restricted to health care workers but so was the bloodborne pathogens standard before it was expanded in scope. Recommendations to improve the hazard communication were submitted to OSHA by their general industry advisory committee in August 1996. These pertain mostly to improving MSDSs. According to the

regulatory calendar OSHA has withdrawn generic standards for exposure monitoring, medical surveillance and motor vehicle safety. A proposed rulemaking on indoor air quality (IAQ), which is a top priority at OSHA, is expected in 1997; OSHA is under pressure from the DC Court of Appeals to issue a rule as soon as possible because of an earlier lawsuit by an anti-smoking group. This rule will most likely separate environmental tobacco smoke (ETS) from indoor air source control. It is likely that companies will be required to ban smoking or to provide separate exhaust systems for smoking areas. Also an IAQ rule would require companies to write and implement air quality compliance programs including ventilation standards and source control.

**Top New Priorities**

In December 1995 OSHA released its Priorities List for protection of worker health and safety. They gave special priority to five issues, including an extensive update of the permissible exposure limits (PELs), a noise/hearing conservation standard for non-covered industries (i.e., agriculture), metal working fluids, and silica (crystalline). These issues will be added to the Regulatory Agenda as current rulemakings are completed.

The PELs Update would be to consolidate the list of over 400 PELs for all industries covered by OSHA including agriculture. The agriculture PEL proposal from 1992, which included a cotton dust standard for agriculture, is still active. Agriculture presently does not have a noise standard but any new regulation would be to cover non-covered industries with a Noise/Hearing Conservation standard. Metal working fluids include oil mist but also respiratory disease caused by endotoxins from Gram-negative bacteria that are associated with other organic dust induced respiratory disease.

For silica (crystalline), the International Agency for Research on Cancer (IARC) has just reclassified crystalline silica from a probable human carcinogen to a known human carcinogen. The Mine Safety and Health Administration (MSHA) has a rulemaking underway on silica with a proposal due this summer -- MSHA is taking the lead on this regulation and OSHA could follow their lead. On May 2, 1996 OSHA issued a "Special Emphasis Program" (SEP) to reduce and eliminate the workplace incidence of silicosis from exposure to crystalline silica. Also, on October 31, 1996 the Secretary of Labor announced the start of a public education campaign -- "If it's Silica, It's Not Just Dust" -- to prevent silicosis caused by overexposure to silica dust.

**Additional Priorities**

The additional priority issues, including workplace violence, motor vehicle safety, diesel exhaust, occupational asthma and reproductive hazards, will be addressed through voluntary guidelines and voluntary industry standards. OSHA has said it will work with industry and labor groups

on this issue to encourage worker protection without developing new rules at this time.

For workplace violence OSHA has issued guidelines for health-care and social service workers and has proposed guidelines for late-night retail workers. Motor vehicle crashes are the leading cause of work-related fatalities so OSHA wants to at least issue some guidance for motor vehicle safety. For diesel exhaust, which is considered a probable carcinogen, the MSHA is supposed to issue a proposal in February 1997 and OSHA may follow their lead. OSHA is also interested in occupational asthma (including latex glove allergies) which is related to any workplace respiratory problems.

**NIOSH Research Activities**

NIOSH has allocated funds to conduct research on "Children in Agricultural Settings" because of all the injuries and fatalities with children on a farm, particularly due to farm equipment. There are also 8 National Agriculture Research Centers that get about \$800,000 each to do agriculture related research on illness and safety.

**OSHA's Programs and Outreach Assistance for Small Business**

A list of the OSHA programs for small business assistance are given in Table 5.

Table 1. OSHA Agriculture Standards for Gins (29 CFR 1928)

<b>a. Agriculture Specific Standards</b>
Roll-over protective structures -- 1928.51, 52, 52
Machine Guarding -- 1928.57
Field Sanitation -- 1928.110
<b>b. Other Applicable Standards</b>
General Duty Clause -- 5(a)(1)
Inspections, citations, & proposed penalties -- 1903
Posting, recording and reporting requirements for occupational injuries & illnesses -- 1904
Rules of practice for variances -- 1905

Table 2. 29 CFR 1928.21 OSHA General Industry Standards Applicable to Agriculture

Temporary Labor Camps -- 1910.142
Storage & Handling of anhydrous ammonia -- 1910.111 (a) and (b)
Slow-moving vehicles -- 1910.145
Hazard Communication -- 1910.1200
Cadmium -- 1910.1027

Table 3. OSHA Standards Cited for SIC 0724 (NAICS 115111); All sizes; Federal

<b>Standard</b>	<b># Cited</b>	<b># Insp</b>	<b>\$ Penalty</b>	<b>Description</b>
a. October 1995 - September 1996				
<b>TOTAL</b>	<b>6</b>	<b>2</b>	<b>7850.00</b>	
1910.333	2	1	3000.00	Electrical, Selection & Use of Work Practices
1910.335	1	1	1500.00	Electrical, Safeguards for Personal Protection
1910.23	1	1	600.00	Guarding Floor & Wall Openings & Holes
1904.8	1	1	1500.00	Fatality/Multiple Hospitalization Accd. Rep.
5(a)(1)	1	1	1250.00	General Duty Clause
b. October 1994 - September 1995				
<b>TOTAL</b>	<b>25</b>	<b>4</b>	<b>11720.00</b>	
1928.57	8	3	6350.00	Machine Guarding
1910.1200	6	2	550.00	Hazard Communication
1910.254	3	1	2700.00	Arc Welding and Cutting
1910.29	2	1	720.00	Manually Propelled Mobile Ladder Stnds & Scaffolds
5(a)(1)	2	2	900.00	General Duty Clause
1904.6	1	1	0.00	Retention of Records
1910.24	1	1	0.00	Fixed Industrial Stairs
1910.147	1	1	0.00	Lockout/Tagout
1910.135	1	1	500.00	Occupational Head Protection

Table 4: OSHA Rulemaking

- On Nov. 29, 1996 OSHA published its **Regulatory Agenda**. Section 1 shows the Regulatory Agenda issues important to the cotton industry and the current status of each.
- On December 13, 1995 OSHA released its **Priorities List** for protection of worker health and safety. They gave **special priority** to five issues; those are seen in the second section of the table. These issues will be added to the Regulatory Agenda as current rulemakings are completed.
- **Additional priority** issues (from the priorities list), seen in section 3, will be addressed through voluntary guidelines and voluntary industry standards. OSHA has said it will work with industry and labor groups to encourage worker protection without developing new rules on these issues at this time.

ISSUE	STATUS
<b>1. Current Regulatory Agenda</b>	
• Health & Safety Management Standard (for general industry and agriculture)	draft proposal 11/96; proposal end '97 (safety standard)
⇒ medical surveillance (ANPR 9/88; withdrawn 3/95)	could be part of H& S Management Standard
⇒ monitoring (ANPR 9/88; withdrawn 3/95)	could be part of H& S Management Standard
• Ergonomics	ANPR 8/03/92; Proposed rule in 1998; FR notice requesting comments early 1997
• Tuberculosis	Proposal 3/97
Respirators	ANPR 1982; proposal 11/94; final action 1/97
• Indoor Air	proposal 4/94; hearings; OSHA reviewing comments; 11/96 court declined to compel regulation of tobacco smoke
• Hazard Communication	NACOSH held 4 hearings in 1996 to discuss issues relating to simplifying MSDSs, recordkeeping, training effectiveness, nuisance dust, etc. Recommendations to improve standard to OSHA 9/96.
• Simplified Recordkeeping (occupational injury/illness reporting requirements)	Proposal 2/2/96; final standard 6/97
• Abatement verification	proposal 4/19/94; final rule 3/97
• Grain Handling Facilities	Changing definition of a storage facility as related to confined space. (Proposal 12/95). Final standard 3/8/96
• PELs for Air Contaminants Update (about 20 new PELs)	(n-hexane included) public meeting 2/22/96; proposal 9/97
• Confined space (revisions to clarify rescue and emergency services, flexibility in retrieval line attachment, employee rights to observe evaluations and results)	proposed 11/94; final 1/97 (rewriting existing standard into "plain English" pursuant to reinvention initiative)
• Process Safety Management	adding new chemicals and raising issue of reactives -- 1997 priority
<b>2. Top New Priorities</b>	
<b>To be added to OSHA's regulatory calendar as others are completed</b>	
• PELs Update (more extensive/on regular basis)	Agriculture proposal 6/92 (still active)
• Noise/Hearing Conservation	for construction and other non-covered industries (e.g., agriculture)
• Metal Working Fluids (oil mist)	could affect respiratory disease/endotoxins; SAC 12/96
• silica (crystalline)	IARC has classified as human carcinogen; MSHA has rulemaking underway, proposal due 6/97
<b>3. Additional Priorities</b>	
<b>These will be addressed through guidelines, voluntary industry initiatives, informational campaigns, and other means, without developing new rules at this time.</b>	
• Workplace Violence	3/96 non-mandatory guidelines for health-care and social service workers; OSHA holding add'l stakeholder meetings; proposed guidelines late-night retail workplace comments due 12/96
• Motor Vehicle Safety	proposal 7/90; withdrawn 3/95
• Diesel Exhaust	MSHA proposal 2/97
• Occupational Asthma (including latex allergy)	could affect organic dusts
• Solvents	
• Reproductive Hazards	
<b>NIOSH Research Activities:</b>	
Children in Agricultural Settings	funds have been allotted to conduct research; workgroup being formed now
National Agriculture Research Centers	8 centers get \$800,000/year for research on agriculture related illness and safety; centers at U. CA Davis, U. AL Birmingham

Table 5. OSHA's Programs and Outreach Assistance for Small Business

Penalty Reduction for Size:	OSHA may grant reductions of up to 60% for small firms
Penalty Reductions for Good Faith:	OSHA may grant a 25% penalty reduction if a firm has an effective safety and health program
Rules with Flexible Requirements for Small Firms:	Trenching around Residential Home Foundations Lead in Construction Emergency Evacuation Plans Process Safety Management
Consultation Program:	Over the last 5 years, OSHA's on-site consultation services conducted more than 100,000 free visits, helping employers correct 800,000 hazards. About 40% of these visits were with firms with fewer than 50 employees. Run by state government agencies, this service is available on request to help smaller more hazardous employers find out about potential hazards at their worksites and improve or implement effective worksite safety and health programs.
Training Grants:	About \$500,000 has been awarded to non-profit groups to develop programs to assist small businesses in establishing safety and health programs. In addition, \$200,000 was awarded recently to train small logging firms.
VPP Mentoring:	OSHA and the Voluntary Protection Programs Participants Association (VPPA) operate a mentoring program to help small firms applying for entry into VPP refine their safety and health programs. The VPP is OSHA's program to recognize a firm's safety and health achievements and excellence. Applicants are matched with a VPP site that shares its experience, knowledge, and safety and health experience.
State Plans:	Twenty-five states and U.S. territories operate their own, federally approved occupational safety and health programs. In these states, most OSHA enforcement is conducted by the state. These state programs must be at least as effective as the federal program, but need not be identical. Many offer additional programs of assistance to small businesses.
Training Institute Education Centers:	Twelve education centers around the country offer training to employers and employees in complying with OSHA rules. For a list of centers and courses see OSHA's home page on the Internet, or call the OSHA training institute at 847-297-4810.
Pro-Bono Training:	The American Industrial Hygiene Association, the American Society of Safety Engineers, and others are joining with OSHA to provide training of small employers. For more information contact Ms. Cathy Cronin at the OSHA Training Institute at 847-297-4810
CD-ROM:	OSHA's CD-ROM is the Government Printing Office's #1 selling CD-ROM product. It includes a variety of information such as standards and interpretations. Order #729-13-00000-5; Cost \$79.00 annually (4 discs quarterly); \$28.00 for a single copy. For more information call Government Printing Office at 202-512-1800.
OSHA Home Page:	Internet Access to OSHA rules and assistance < <a href="http://www.osha.gov/">http://www.osha.gov/</a> >
Expert Systems	Unique technology-based assistance tools to help employers understand and comply with technical rules like OSHA's cadmium standard and asbestos standard. Available on the Internet or through the Dept. of Labor's Electronic Bulletin Board at 202-219-4784.
U.S. Small Business Advisor:	One-stop Internet access to regulatory information. < <a href="http://www.bus.gov/">http://www.bus.gov</a> >